

Mountain Waterway



Craig DeHart, general manager of the Middle Fork Irrigation District, at the Coe Creek diversion/fish screen.

Photos by Jurgen Hess

Middle Fork district monitors irrigation flows for 6,400 acres in the valley

By Susan Hess

Craig DeHart carries a box of round toothpicks in his pickup. He made a hole at one end of the box so he just has to tap it to pull out a toothpick.

Craig is going up into snow country on a December day to see the Coe Creek diversion and Laurance Lake Dam on Mount Hood's north side.

It is a bit below freezing, yet he is wearing cotton jeans and a thin jacket with a broken zipper.

In the shiny four-wheel drive pickup, he drives with his seat leaned half way back. He has made this same drive almost every day for 22 years, and he seems as calm and unhurried as if going for groceries.

Craig, 45, is general manager of the Middle Fork Irrigation District.

"This is one of the best jobs in the valley," he says. The office is in a modular unit next to a small shop off Clear Creek Road south of Parkdale, the town where Craig grew up. He lived away only the four years he was stationed in Nevada with the U.S. Coast Guard. He was an electrician in the Coast Guard, training useful in this job.

Middle Fork, one of five irrigation districts in Hood River County, provides water for some 6,400 acres.

Just a few miles south of the office, Craig turns onto a narrow snow-covered road. A few minutes later, he stops before a steel gate, ambles up to it, walks back, reaches into the back of the pickup and pulls out a small propane torch.

"Lock's frozen," he says.



Craig, who gained electrician experience in the U.S. Coast Guard, stands in front of gauges at Plant 1.

On the way up to the mountain, he stops at Plant 1. Inside is one of the district's three electrical turbine generators. It is noisy. The two-story room is uncluttered and spotless. Steel encloses the turbine. Water from Laurance Lake, 700 feet higher on the mountain, is piped to the plant. The elevation difference creates the head to drive the turbine.

In total, the district's system generates 3.3 megawatts, enough to power 3,300 homes. PacifiCorp buys the electricity, and the income provides 90 percent of the district's revenue, Craig says.

"This keeps our irrigators' rates low," he says, back on the road heading to Laurance Lake. "All of our accounts (irrigators) assumed the debt, took that risk, and it's paid off."

The snow is deeper as the truck heads up the mountain, but the road is plowed. Someone from the district staff checks the dam every day.

A few miles short of the lake, Craig turns the pickup onto another narrow road, another gate and frozen lock. The road is plowed to the district's newest project—the \$1.4 million diversion/fish screen on Coe Creek.

Craig taps the toothpick box and pulls one out.

The day is overcast and cold enough to make the 2 feet of snow powdery.

The Coe Creek diversion uses a Farmers Conservation Alliance Farmer's Screen for fish protection. The screen filters out sand and cobble while providing safe passage for fish. A longer description of the screening system can be found in the August 2008 Ruralite.

Coe Creek carries a high sediment load in summer. Before this diversion, a low dam blocked in the creek. Several times a day, staff had to come open the sluice gates, which dumped more than the normal amount of sediment into Coe Creek. Not good for bull trout, a threatened species, Craig says. That violated Oregon Department of Environmental Quality turbidity standards. The sand eroded the electrical turbines and the irrigators' sprinklers.

The diversion upgrade has operated since January 2010.

"It is exceeding our expectations," Craig says.

Removing the dam opened up about three miles of stream for fish. It gives the staff flexibility to keep the water level

higher in Laurance Lake, which keeps water temperature cooler—better for resident fish. Eliot Creek also has a version of the farmers screen.

Just before the lake, Craig turns off the road onto a lane that pitches steeply down. The truck slips a bit. If this makes Craig nervous he doesn't show it. He was a wrestler in high school and has kept both a wrestler's build and patience. He and wife Karen have three grown sons who also were high school wrestlers.

At the bottom of the pitch, Craig turns the truck to face the 110-foot-high earth dam the district built in 1969. Water cascades down the spillway in falling sheets.

When it is time to leave, he revs the truck, backs up the road and heads to the top of the dam. Craig says he plays hockey here in winter and fishes the lake in summer. At the gate, someone had built a campfire, a partially melted plastic bottle sits among now cold charred wood.

The lake and dam are on U.S. Forest Service land. In 2021, Middle Fork must apply for a re-issue of their special use permit for the lake and dam, Coe diversion and all of the district's other facilities on Forest Service land. When the dam was built, fish passage was not required, but that will be a critical piece of the 2021 permit.

"Clear, Pinnacle, Coe and Elliot Creeks are the lion's share of the water we divert," Craig says.

Coe and Elliot are fed by Mt. Hood's glaciers, and they are receding. Researchers at Portland State University reported in 2008 that Mount Hood's glaciers have lost about 30 percent of their surface area since 1900.

"The district is looking at how to meet demand if the glaciers are gone," Craig says.

On the way, back to the office, the sun has come out. Craig stops by a farm field and points out elk tracks in the snow.

"It's important that people know that no one person can do this job," he says. "It takes everybody working together—the board, staff and patrons." ■